Perfectionists

Kramer-Allrad Mini-loaders 180 • 280





Balance, not compromise: Getting ahead means Offering the most.



WHEEL LOADERS FROM KRAMER-ALLRAD HAVE ALWAYS
BEEN AHEAD OF THEIR TIME. TODAY, THEIR QUALITIES AND
VERSATILITY STAND FOR EVERYTHING THAT IS REALLY NEEDED:
STABILITY, STRENGTH AND RELIABILITY.

The ability to adapt quickly and to be more sparing of resources than the rest has not only been the driving force behind evolutionary survival but is also a tradition at Kramer-Allrad. It consists in understanding where the efficiencies lie and making the very most of them.





Perfect Body-Mass-Index:

Optimal power-to-weight ratio. Compact dimensions. Easy to transport.





Perfectly proportioned performance:

The ideal combination of power in a compact package.

Power and versatility at your fingertips, easy to transport and always on-call: the 180 and 280 models represent a performance category all to themselves in the compact wheel loader class.

The one-piece chassis contributes to the extremely compact dimensions of the wheel loader, and the optional collapsible ROPS rollbar (international safety-certified) means that even really low headroom access is possible, such as for basement garages.

The ratio of tare weight to payload also signifies an exceptional power-toweight ratio, unparalleled in this class of vehicle.

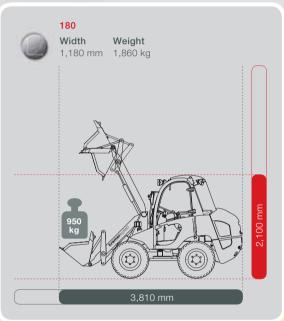


180

Kramer-Allrad factors:

- Unparalleled ratio of low tare weight to high payload, even on bends.
- Compact dimensions for maximum flexibility.
- Easy to transport on trailer or truck; hoisting eyelets for easy relocation of the loader.









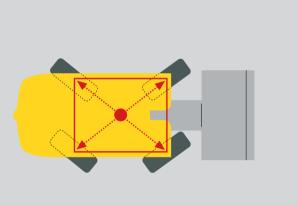




Drive physics:

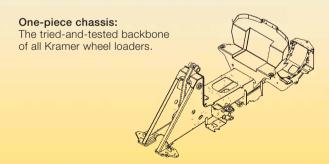
Logic is the focal point.
Safety is the constant.
Natural law is the fulcrum.













You need to be able to rely on the constant stability of a high payload. Only a one-piece chassis guarantees that the machine's centre of gravity will always move exclusively along the longitudinal axis for each load and will never drift outwards. There is no risk of the machine tipping or shedding its load. Even abrupt steering manoeuvres cannot knock the loader off-track.

* With each wheel loader from Kramer, you can always be sure of lifting and transporting easily and safely whatever the loader has picked up. We call this "Load stability according to the stacker principle".











Kramer-Allrad factors:

- · One-piece chassis for maximum stability and off-road capability.
- Supreme manoeuvrability thanks to all-wheel steering.
- Constant high payload even when taking bends.
- Kind to the subsoil thanks to the free-rolling wheels, as compared to tracked vehicles



Safety means staying in one piece. Just like our rigid chassis.

Safety requires contingency planning. And because you never know if the ground is going to give way beneath your wheels, the stability of a wheel loader is extremely important.

Manoeuvrability that stands out a mile:

Kramer puts you in the fast lane.

Why go all around the houses? The four-wheel steering of Kramer wheel loaders have played a big part in assuring their reputation for helping users to work with greater versatility, more quickly and more productively.

The parallel boom:

Keeps lift capacity and load in perfect equilibrium.

Always in the field of view, so that the load can be kept stable and work can proceed quickly and with precision. The high tilt-in/tilt-out angle means that no material is spilt, even with a full bucket.

A comfortable vista:

Understanding how things come together.

Recognizing success factors. Getting the results you want.









- 1 Simply drive up to the implement.
- 2 Hitch up the tool using the hydraulic controls in the cab.
- 3 At the touch of a button and in full view, simply secure or detach it.

The Kramer-Allrad quick-hitch is hydraulic. And this comes as standard. It is not a costly option, as with other miniloaders.

Buying a wheel loader from Kramer-Allrad means that you also get access to an entire system.

One thing fits into another, adding value to the whole. Compatibility brings added value-for-money.



180







- 1 A comfort cab with generous internal headroom and width and excellent visibility of whatever tool attachment you may be using. Disconnecting the electrical supply and unscrewing four screws is all it takes to dismantle it.
- 2 Wide doorways on either side: a special design award-winner for safety: true quality always shines through in the details.
- 3 The joystick also controls the third control circuit.
 Also with pilot-controlled work hydraulics for precision working, low operating force and low noise levels in the cab.
- 4 Easy and direct maintenance access with no need to displace the entire cab each time: this saves time and encourages the user to genuinely carry out the daily checks.

Getting ahead is getting easier: Leveraging versatility. Raising productivity. Increasing security.

on public roads: more scope, more possibilities of deployment, greater efficiency and, not least, greater safety and security for all.

2 Although small in size, even the loading of a sixwheeler is a cinch for the mini-loader.

3 As practical as a small crane: the wheel loader with loading hook and winch demonstrates once again how Kramer puts versatility into practice.

Highway-certified as standard as a towing vehicle

- 4 Efficient mulching thanks to the high hydraulic performance and compact format: power, precision steering and high manoeuvrability ensure a clean cut and high surface coverage. For the mulching of grass, timber and shrubbery.
- 5 Smooth as silk on all levels: the mini-loader also cuts the mustard as a grader. It's just incredible how versatile these compact jacks-of-all-trades can be, whether for municipal use or general maintenance work.





Whether loaded on a trailer or as a towing vehicle in its own right driving along the public roads: only with Kramer mini-loaders will you find highway-certification comes as standard. With others, it is a possibility that very often does not exist.

On the road to becoming absolutely indispensable: with the Kramer mini-loader you can merge safely with the road traffic, even when you have a full bucket. The high backtip angle of the bucket ensures that none of the load will be spilt. And when it's on the trailer, there's plenty of room for other working machinery, equipment, materials and tool attachments.

- 6 As a warehouse loader it's in a class of its own: all dimensions and functions are optimised for use in a warehousing environment. Thanks to the collapsible ROPS safety rollbar, even low entrances or doorframes can be negotiated without difficulty.
- With a rotary mower attached, the loader is quickly transformed into a highly efficient grass maintenance device.
- 8 The Skid Steer attachment plate is a tried-andtested interface for attaching more and more tools and devices.
- 9 The Kramer wheel loader as a road sweeper, which can be precisely steered, rapidly converted and deployed with the utmost efficiency.
- 10 With a soil auger, the 280 is a vital companion for planting masts, fences or other enclosures.
- 11 Even large roadsweepers can be efficiently deployed and precisely steered with the 280.
- 12 The 280 is a reliable tool bearer for the hedge trimmer. This makes it ideal for local authorities, gardening and horticulture.
- 13 The Kramer mini-loader is also ideally suited to clearing footpaths or small areas. Efficiency gets a real boost by combining the snow blade with the gritter.

























THE HISTORY OF KRAMER-ALLRAD IS CLOSELY TIED IN WITH THE BODENSEE REGION AND ITS PEOPLE. OVER THE COURSE OF ITS 80-PLUS YEARS OF EXISTENCE, ITS ENTERPRISE CULTURE HAS BEEN IMBUED WITH A SENSE OF PRACTICALITY, CLOSENESS TO NATURE, ECOLOGY AND SUSTAINABILITY.



5 model ranges:

Perfect formation.

Ideal balance of payload,
performance and bucket capacity.

ALL KRAMER LOADERS COME OFF THE PRODUCTION LINE OF A LEADING COMPACT MACHINERY MANUFACTURER BASED IN THE HEART OF EUROPE. THEY BEAR THE HALLMARK OF QUALITY, STABILITY AND CONSISTENCY THAT YOU CAN RELY ON: TYPICALLY "MADE IN GERMANY". EVERY MODEL IS BUILT TO LAST AND IS A MODULAR ELEMENT OF AN OVERALL SYSTEM.

ONE PART FITS INTO ANOTHER, AND EVERYTHING IS FUTURE-PROOFED, FOR LONG-TERM COST-EFFECTIVENESS.









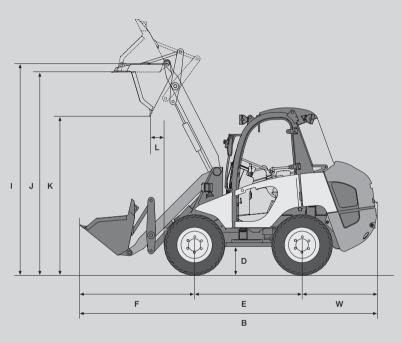


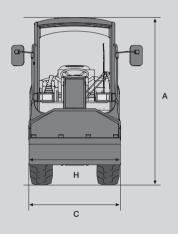


	Med. engine oliforit	Buched capacity	y, payload	weight	Turning tables Types	Nat. speed	Mat. load over heigh
MINI-LOADERS							
250 ROPS	17 kW / 23 PS	0,25 – 0,45 m ³	870 kg	1540 kg	1970 mm	0-20 km/h	2680 mm
350 ROPS	27 kW / 37 PS	0,35-0,55 m ³	960 kg	1620 kg	1970 mm	0-20 km/h	2680 mm
350 CAB	27 kW / 37 PS	0,35-0,55 m ³	960 kg	1720 kg	1970 mm	0-20 km/h	2680 mm
180	23 kW / 31 PS	0,3-0,4 m ³	950 kg	1860 kg	1940 mm	0-20 km/h	2458 mm
280	28 kW / 40 PS	0,65 – 1,1 m ³	1900 kg	3300 kg	2430 mm	0-20 km/h	2820 mm
WHEEL LOADERS							
750	45 kW / 61 PS	0,75 – 1,15 m ³	2300 kg	4200 kg	2550 mm	0-30 km/h	2915 mm
850	45 kW / 61 PS	0,85 – 1,3 m ³	2350 kg	4500 kg	2550 mm	0-30 km/h	3100 mm
950	58 kW / 79 PS	0,95 – 1,6 m ³	2500 kg	4700 kg	2780 mm	0-30 km/h	3120 mm
1150	58 kW / 79 PS	1,15 – 1,8 m ³	3500 kg	5900 kg	2850 mm	0-30 km/h	3235 mm
380	45 kW / 61 PS	0,75 – 1,15 m ³	2400 kg	4300 kg	2900 mm	0-40 km/h	2915 mm
480	45 kW / 61 PS	0,85 – 1,3 m ³	2600 kg	4750 kg	2900 mm	0-40 km/h	3100 mm
580	58 kW / 79 PS	0,95 – 1,5 m ³	2750 kg	4900 kg	2900 mm	0-40 km/h	3050 mm
680	58 kW / 79 PS	1,05 – 1,6 m ³	3100 kg	5650 kg	2950 mm	0-40 km/h	3050 mm
780	58 kW / 79 PS	1,15 – 1,8 m³	3500 kg	6100 kg	2950 mm	0-35 km/h	3200 mm
880	88 kW / 120 PS	1,5 -2,5 m³	4500 kg	8400 kg	3450 mm	0-35 km/h	3530 mm
TELE WHEEL LOA	DERS						
750T	45 kW / 61 PS	0,75-1,2 m ³	2000 kg	5100 kg	2550 mm	0-30 km/h	4510 mm
680T	58 kW / 79 PS	0,95-1,6 m ³	2600 kg	5950 kg	2850 mm	0-40 km/h	4450 mm
COMPACT TELEH	ANDLERS						
1245	23 kW / 31 PS	0,4-1,03 m ³	1200 kg	2530 kg	2607 mm	0-20 km/h	4130 mm
2506	50 kW / 68 PS	0,85-1,8 m ³	2500 kg	4300 kg	3500 mm	0-30 km/h	5730 mm
TELEHANDLERS							
3307	88 kW / 120 PS	1,2-2,5 m ³	3300 kg	7200 kg	3600 mm	0-40 km/h	7050 mm
4507	88 kW / 120 PS	1,2-3,0 m ³	4400 kg	8100 kg	3600 mm	0-40 km/h	7050 mm
4009	88 kW / 120 PS	1,2-3,0 m ³	4000 kg	8600 kg	3850 mm	0-40 km/h	8825 mm



180 280





With standard bucket and standard tyres

With standard bucket and standard tyres (front view)

DII	MENSIONS	180	280
Α	Height	2,100 mm	2,340 mm
	Height with ROPS rollbar	2,160 mm	2,400 mm
	Height with ROPS rollbar collapsed	1,745 mm	1,985 mm
В	Length	3,810 mm	4,610 mm
С	Width without bucket	1,180 mm	1,500 mm
D	Ground clearance	200 mm	320 mm
Е	Wheelbase	1,385 mm	1,750 mm
F	Centre of front axle to tip of teeth	1,470 mm	1,620 mm
G	Centre of rear axle to end of vehicle	955 mm	1,240 mm
Н	Bucket width	1,200 mm	1,650 mm
- 1	Pin height	2,578 mm	3,020 mm
J	Load-over height	2,458 mm	2,820 mm
K	Dump height	2,075 mm	2,300 mm
L	Dump reach	600 mm	250 mm
	Pallet height	2,250 mm	2,670 mm

_	Weight	1,860 kg	3,300 kg				
	Turning radius Tyres	1,940 mm	2,430 mm				
	Turning radius Track circle	1,790 mm	2,280 mm				
_	Turning radius Bucket arm	2,710 mm	3,400 mm				
7.00	ENGINE		V				
	Make	Yanmar	Yanmar				
	Type/Model	3TNV88, water-cooled 3-cylinder 4-stroke in-line engine with natural aspiration direct injection	4TNV88, water-cooled 4-cylinder 4-stroke in-line engine with natural aspiration direct injection				
	Output	23 kW / 31 hp @ 2,600 rpm	28 kW / 40 hp at 2,400 rpm				
	Max. torque	107 Nm @ 1,560 rpm	142 Nm @ 1,440 rpm				
	Displacement	1,642 cm³	2,190 cm ³				
	Emissions	tested and certified as per 97/68EC, emissions standard level 3A	tested and certified as per 97/68EC, emissions standard level 3				
2	POWER TRANSMISSION						
9	Drive	continuously variable hydrostatic axial-p 4-wheel drive, brake/inching pedal	continuously variable hydrostatic axial-piston gearbox, 4-wheel drive, brake/inching pedal				
	Drive speed	0 – 20 kph	0 – 20 kph				
	Axles	Planetary steering axles	Planetary steering axles				
	Total oscillation angle	10°	14°				
	Differential lock	45 % locked	45 % locked				
	Service brake	hydrostatic	hydrostatic				
	Parking brake	Mechanical disc brake	mechanical disc brake				
_	Standard tyres	28 x 9.00-15	12.0/75-18				
	STEERING AND WORK HYDRAULICS						
9	Mode of function	Hydrostatic four-wheel steering	Hydrostatic four-wheel steering				
	Steering pump	Work pump via priority valve	Work pump via priority valve				
_	Steering ram	Double-acting, with independent synchronization in final position	Double-acting, with automatic synchronization				
_	Max. steering angle	2 x 38°	2 x 38°				
_	Work pump	Gear pump	Gear pump				
_	Flow rate	20 I/min, 40 I/min (Option)	52 I/min, 65 I/min (Option)				
	Pressure	240 bar	240 bar				
	Filter	Combined suction reflux filter	Combined suction reflux filter				
_	Pressure limitation	Primary pressure limitation, secondary pressure in tilt ram/lift ram	Primary pressure limitation, seconda pressure in tilt ram/lift ram				
	KINEMATICS						
9	Model	Z-kinematics with optimized parallel motion	Z-kinematics with optimized parallel motion				
	Lifting capacity / Tear-out force	18.7 / 15.1 kN	28.0 / 27.3 kN				
_	Raising/lowering	6.7 / 5.0 sec	4.8 / 3.7 sec				
	Tilting in/out	0.6 / 0.7 sec	0.5 / 0.6 sec				
	Tipping load (standard bucket / pallets)	1,200 / 975 kg	2,340 / 2,000 kg				
	Payload S = 1.25 / 1.67 (pallets)	780 kg / 580 kg	1,600 / 1,200 kg				
_	Payload in transport position S = 1.25 (pallets)	950 kg	1,900 kg				
_	Scraping depth	51 mm	49 mm				
- 3	CAPACITIES						
9	Fuel tank	30 I	62				
_	Hydraulic oil tank	40 I	65				
3	NOISE EMISSIONS						
0	as per 2000/14/EC						
Tak.	ELECTRIC SYSTEM						
~	Operating voltage	12 V	12 V				
	Battery	72 Ah	72 Ah				
	Alternator	55 A	55 A				
_	Starter	1.2 kW	1.4 kW				

STANDARD EQUIPMENT 180 • 280

CAB

Soundproofed, vibration-insulated, 4-point suspension cab, with large, curved, tinted windows. Excellent all around visibility from a spacious and comfortable work environment for increased safety and efficiency. Extremely roomy cab with a large number of storage possibilities. Optimized visibility for a maximum dump height.

Access. The cab can be accessed from both sides using the large and convenient steps.

Doors. The fully-glazed doors provide optimal side visibility. Door and window open together. Full access through right-hand door by folding back the joystick console.

Grammer driver's seat (MSG 20) mechanically sprung as per ISO 7096 with automatic seat belt, weight adjustment from 50–130 kg, 5-stage backrest adjustement and horizontal adjustment through 210 mm.

Heating, Ventilation. 2-speed powerful heating and ventilation.

Instrument panel. Neatly designed instrument console with control lights and ergonomically arranged tip switches.

Joystick console. Ergonomically laid-out cockpit controls such as:

- hydraulically controlled joystick for raising/lowering the boom and tilting in/out, along with integrated 3rd control circuit for locking/unlocking the quick hitch facility and for running hydraulic implements.
- Options switch.

Windows. The door can be opened and locked in two positions (180° and 10°).

Rearview mirrors. Large outside mirrors, foldable on either side.

Sun visor

Screen wipers. Front and back. The front twin windscreen blades on the Kramer have an extremely large wipe radius, offering the driver unimpaired vision through 85% of the windscreen glass. The large washer fluid container offers extended use before the need for refill.

Floor mat. The floor mat is level with the frame enabling easy cleaning of the cab.

Cab lights

Radio installation

12V socket

Detachable cab. Even with the detachable cab removed, the 180/280 remains fully functional. The cab can be detached by removing just four screws.

Hoisting eyelets. Using the hoising eyelets it is possible to relocate the entire machine in hard-to-access workspaces (ship loading bays, cellar excavations, work trenches, etc.).

LIGHTS

Headlights 2 at front with main / dipped beam and side light Working lights 1 at rear left

Rear lights, indicators

ENGINE HATCH

Opens wide for optimal maintenance access.

QUICK-HITCH FACILITY

Hydraulic

ENGINE AIR SUPPLY

With air filter safety cartridge.

TYRES

180 28 x 9.00-15 280 12.0/75-18

OPTIONS 180 • 280

OPEN CAB

Standard cab with no front windscreen or doors, with rear windscreen; upgradable to standard cab.

COLLAPSIBLE ROPS ROLLBAR

PROTECTIVE FOPS SCREEN

LIGHTS

Rotating beacon

Working lights 2 at front

HEATED REAR WINDSCREEN

HYDRAULICS

4th control circuit for front and rear tool attachments

with 40 l/min pump performance

with 65 l/min pump performance

Hose burst valves for lift and tilt rams

Floating position

Load stabilizer

Unpressurised front reflux

High-Flow configuration with extra pump performance

PROTECTION AGAINST AGGRESSIVE ENVIRONMENTS PREHEATING

Fuel, engine oil and hydraulic oil

TRAILER COUPLING

TYRES

Wide-base tyres

Tyre puncture protection kit

Foam-filled tyres

Other special tyres:

180 315/55 R16 (municipal profile) 10 R 16.5 (industrial profile)

280 10.5-18 (snow chain deployment)

12.0-16.5 (30 mm lower) **325/70 R18** (direction-independent) **325/70 R18** (traction profile)

12.4-16 (lawn tyres)

HYDRAULIC QUICK-HITCH PLATE SKID STEER LOADER

SAFETY & SECURITY

Warning stripes

Engine immobiliser

ELECTRICS

Electric socket for front tool attachments

7-pin rear electric socket

Reversing warning system

Battery master switch

PAINT OTHER THAN STANDARD

VEHICLE TOOL KIT

BIODEGRADABLE OIL

PANOLIN HLP Synth46

WARRANTY EXTENSION

TOOL ATTACHMENTS 180 • 280

Pallet forks, standard bucket, grab bucket, lightweight materials bucket, side-swing bucket, gritter, snow blade. Other tool attachments on request.



Kramer-Werke GmbH Wacker Neuson Straße 1 D-88630 Pfullendorf D-88630 Pfullendorf Tel. 00 800 90 20 90 20 Fax +49(0)7552 92 88-234 info@kramer.de www.kramer.de

